TROPICAL CYCLONE 31 - 09/18/0600Z TO 09/24/1200Z

I. DATA

A. STATISTICS

1. NUMBER OF WARNINGS ISSUED - 26
2. NUMBER OF WARNINGS WITH TYPHOON INTENSITY - 18
3. TOTAL DISTANCE TRAVELED DURING TROPICAL WARNING PERIOD - 1356 MI

B. CHARACTERISTICS AS A TYPHOON

1. MINIMUM OBSERVED SLP - 960MBS AT 211015Z
2. MINIMUM OBSERVED 700MB HEIGHT - 2752M. AT 210330Z
3. MAXIMUM SURFACE WIND - 095 KTS (FROM BEST TRACK)
4. MAXIMUM RADIUS OF SURFACE CIRCULATION - 360 MI

II. DEVELOPMENT

A. INITIAL IMPETUS - DEVELOPMENT OF DIVERGENCE AT 200MB LEVEL OVER SURFACE CYCLONIC CIRCULATION

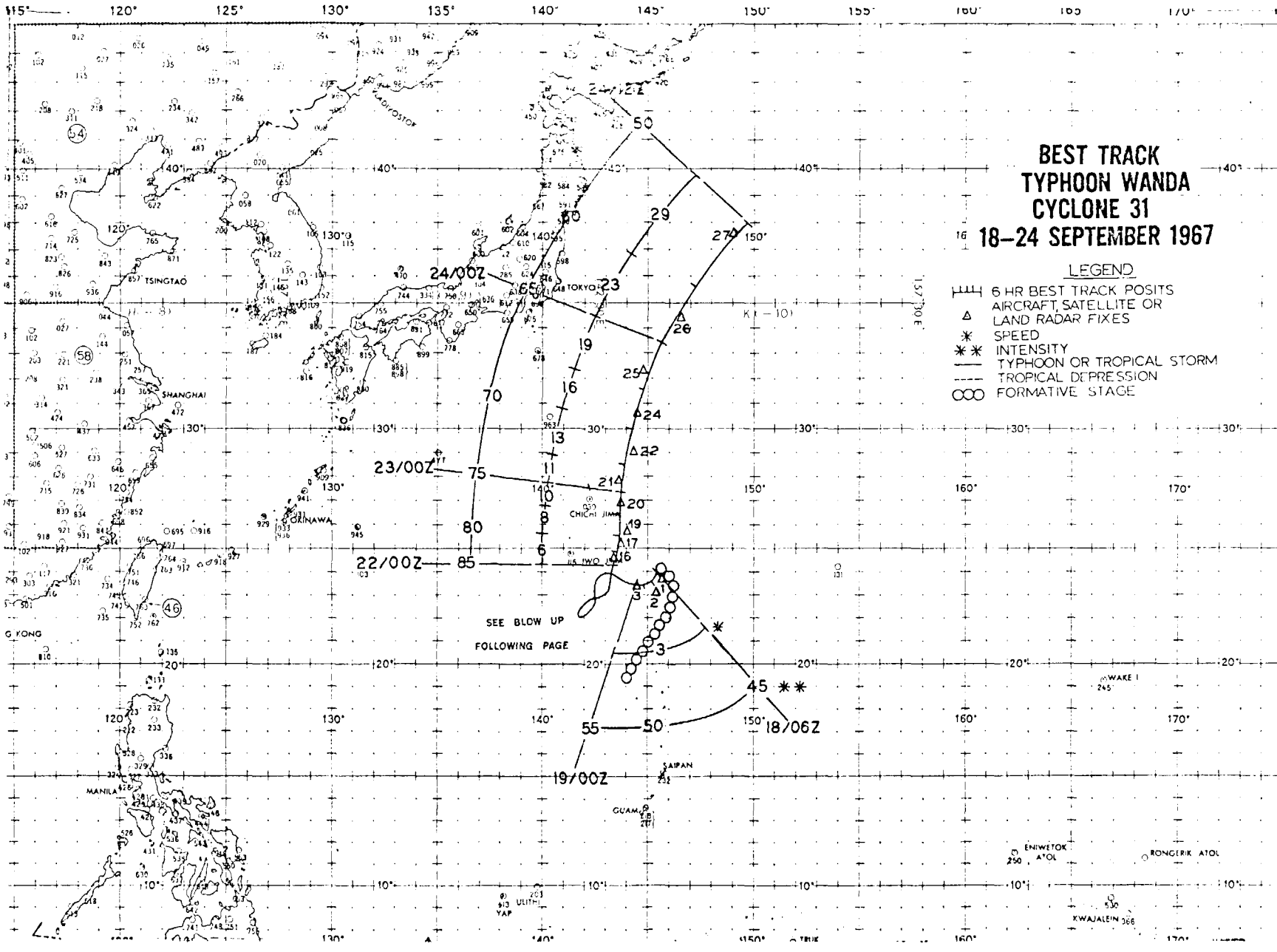
B. INITIAL SURFACE VORTEX

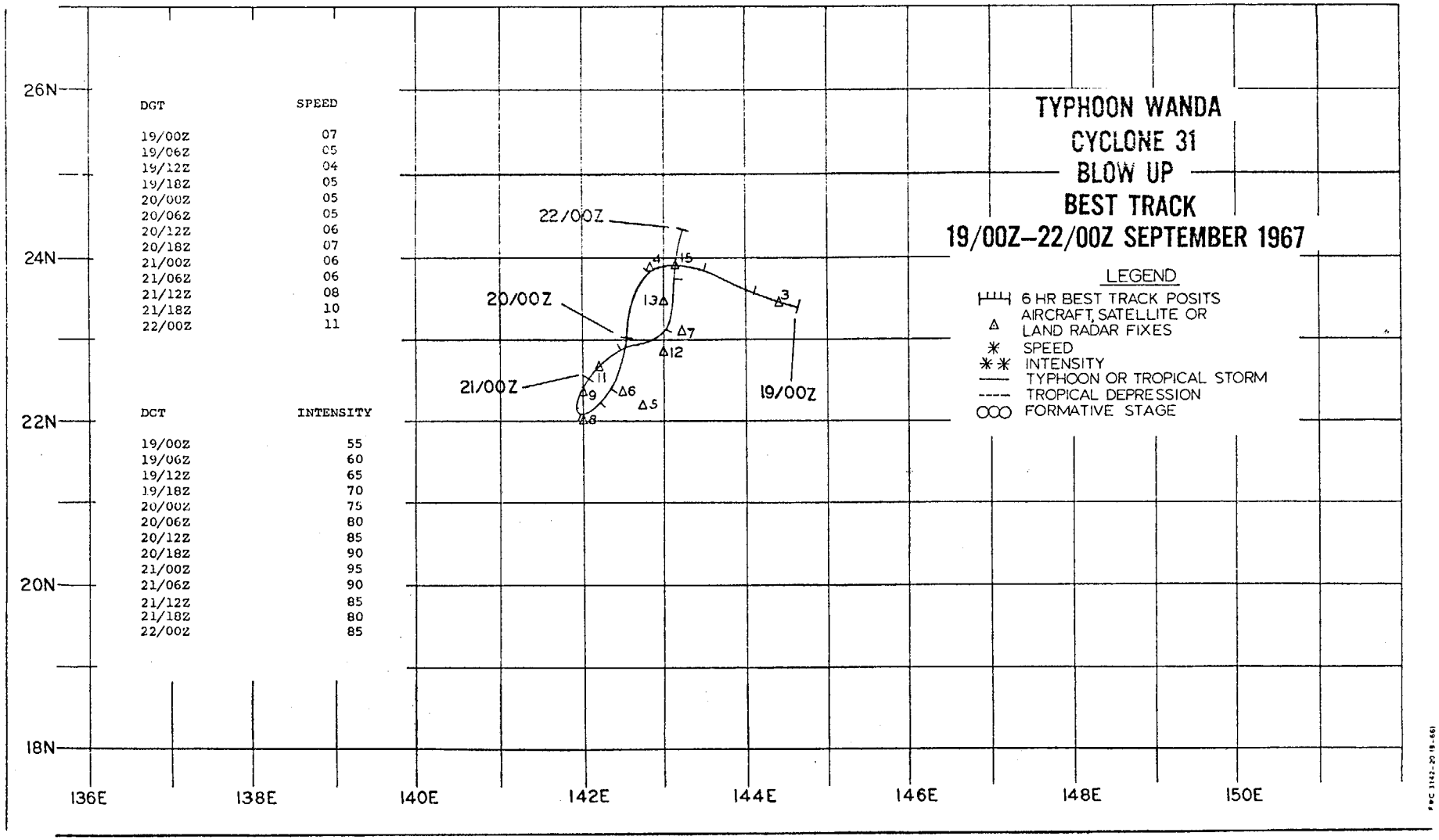
1. JUNCTION VORTEX AT 150000Z
2. SURFACE PRESSURE LESS THAN 1003MB

C. 200MB FLOW ABOVE SURFACE VORTEX

1. INITIAL - WEST
2. UPON REACHING TYPHOON INTENSITY - SOUTHWEST

III. FINAL DISPOSITION - BECAME EXTRATROPICAL


BEST TRACK
TYPHOON WANDA
CYCLONE 31
18–24 SEPTEMBER 1967
LEGEND
6 HR BEST TRACK POSITS
AIRCRAFT, SATELLITE OR LAND RADAR FIXES
SPEED
INTENSITY
TYPHOON OR TROPICAL STORM
TROPICAL DEPRESSION
FORMATIVE STAGE
SEE BLOW UP FOLLOWING PAGE
24/00Z
23/00Z
22/00Z
19/00Z
18/06Z
TSINGTAO
SHANGHAI
TOKYO
OKINAWA
CHICHI JIMA
IWO JIMA
SAIPAN
GUAM
MANILA
WAKE I
ENIWETOK ATOL
RONGERIK ATOL
KWAJALEIN
YAP
ULITHI
TRUK



DGT	SPEED
19/00Z	07
19/06Z	05
19/12Z	04
19/18Z	05
20/00Z	05
20/06Z	05
20/12Z	06
20/18Z	07
21/00Z	06
21/06Z	06
21/12Z	08
21/18Z	10
22/00Z	11

DGT	INTENSITY
19/00Z	55
19/06Z	60
19/12Z	65
19/18Z	70
20/00Z	75
20/06Z	80
20/12Z	85
20/18Z	90
21/00Z	95
21/06Z	90
21/12Z	85
21/18Z	80
22/00Z	85

EYE FIXES CYCLONE 31

FIX NO.	TIME	POSIT	UNIT-METHOD-ACCY	FLT LVL	FLT LVL WND	OBS SFC WND	OBS MIN SLP	MIN 700MB HGT	FLT LVL TT/TD	EYE FORM	ORIEN-TATION	EYE DIA	THKNS WALL CLOUD
1	180305Z	23.9N 145.6E	54-P-P05	700MB	040	030	992	3033	--/--	----			F.B.
2	182119Z	23.1N 145.4E	54-P-P03	700MB	030	040	987	2996	14/--	CIRC	----	05	--
3	190322Z	23.5N 144.4E	54-P-P03	700MB	050	040	984	2963	14/--	----			F.B.
4	191602Z	23.9N 142.8E	VW-P-P05	0360M	080	075	976	---	--/--	CIRC	----	15	03
5	192201Z	22.2N 142.8E	54-P-P02	700MB	042	065	972	2844	15/--	CIRC	----	30	--
6	200258Z	22.0N 142.0E	SLTLS	STG X	DIA 04	BNDS 4							
7	200358Z	22.4N 142.5E	54-P-P02	700MB	070	070	969	2810	16/--	CIRC	----	45	--
8	201020Z	23.1N 143.3E	VW-P-P10	0290M	050	060	966	---	--/--	ELIP	NW-SE	30X20	04
9	201540Z	22.3N 142.0E	VW-P-P03	700MB	050	---	986	2772	14/--	ELIP	NW-SE	40X25	05
10	202200Z	22.3N 142.0E	54-P-P03	700MB	070	065	963	2780	17/--	CIRC	----	30	--
11	210330Z	22.5N 142.3E	54-P-P03	700MB	074	065	962	2752	17/--	CIRC	----	20	--
12	210344Z	22.5N 142.0E	SLTLS	STG X	DIA 03	BNDS 3							
13	211015Z	22.8N 143.0E	VW-P-P03	700MB	070	---	960	2824	15/--	CIRC	----	40	--
14	211600Z	23.5N 143.0E	VW-P-F03	700MB	080	---	964	2830	14/--	CIRC	----	40	--
15	212200Z	23.9N 143.2E	54-P-P02	700MB	076	055	969	2795	14/--	CIRC	----	50	--
16	220244Z	24.5N 143.0E	SLTLS	STG X	DIA 03	BNDS 4							
17	220332Z	24.5N 143.4E	54-P-P02	700MB	077	060	965	2765	13/--	CIRC	----	50	--
18	221015Z	25.1N 143.8E	VW-P-P10	0290M	060	065	966	---	--/--	CIRC	----	40	10
19	221515Z	25.7N 144.0E	VW-P-P05	700MB	085	---	---	---	17/--	CIRC	----	30	05
20	222200Z	27.0N 143.8E	54-P-P03	700MB	067	060	964	2792	17/--	ELIP	NE-SW	40X20	10
21	230334Z	27.5N 148.5E	SLTLS	STG X	DIA 03	BNDS 3							
22	230415Z	27.9N 143.6E	54-P-P03	700MB	068	070	964	2783	17/12	ELIP	NE-SW	50X10	--
23	230932Z	29.0N 144.3E	VW-P-P05	0290M	050	045	972	---	--/--	CIRC	----	50	10
24	231529Z	30.7N 144.5E	VW-R-P05	0400M	040	035	---	---	--/--	ELIP	N-S	48X27	12

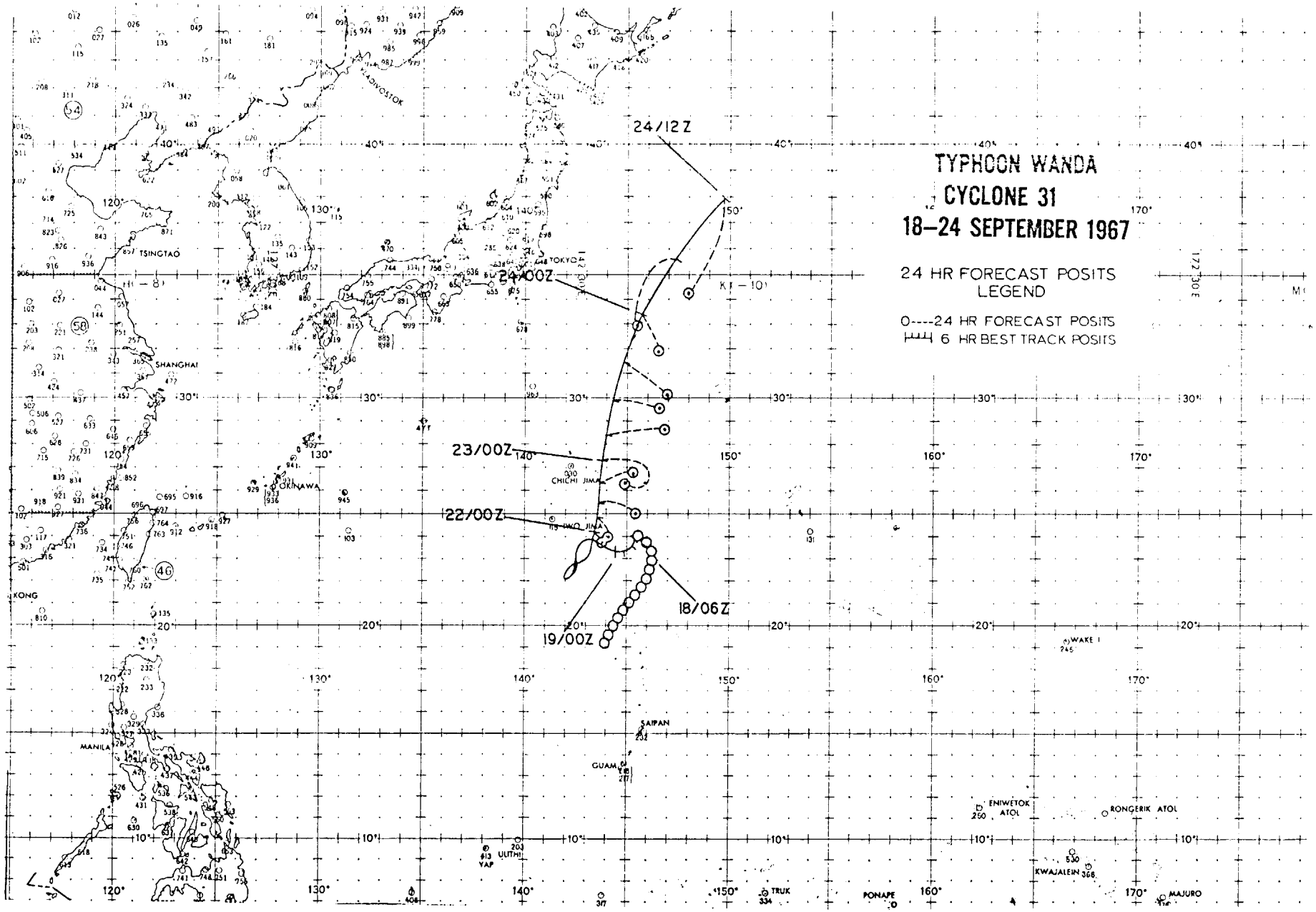
EYE FIXES CYCLONE 31

FIX NO.	TIME	POSIT	UNIT-METHOD-ACCY	FLT LVL	FLT LVL WND	OBS SFC WND	OBS MIN SLP	MIN 700MB HGT	FLT LVL TT/TD	EYE FORM	ORIEN-TATION	EYE DIA	THKNS WALL CLOUD
25	232129Z	32.3N 144.9E	54-P-P05	700MB	120	100	967	2841	20/--	ELIP	NE-SW	30X20	--
26	240345Z	34.5N 146.4E	54-P-P05	700MB	095	085	966	2819	19/--	ELIP	NW-SE	30X25	--
27	241030Z	37.5N 149.2E	VW-P-P10	0300M	050	035	968	---	--/--	CIRC	----	17	--

TROPICAL CYCLONE 31 -- 09/18/0600Z TO 09/24/1200Z
POSITION AND FORECAST VERIFICATION DATA

DTG	STORM POSITION LAT.	LONG.	24 HR. ERROR DEG. DIST.	48 HR. ERROR DEG. DIST.	72 HR. ERROR DEG. DIST.
180600Z	23.9N	145.4E	--------	--------	--------
181200Z	23.6N	145.2E	--------	--------	--------
181800Z	23.4N	144.9E	--------	--------	--------
190000Z	23.4N	144.6E	--------	--------	--------
190600Z	23.5N	144.1E	357-0162	--------	--------
191200Z	23.8N	143.5E	004-0180	--------	--------
191800Z	23.7N	142.8E	010-0222	--------	--------
200000Z	23.0N	142.6E	090-0156	--------	--------
200600Z	22.4N	142.4E	010-0174	002-0360	--------
201200Z	22.3N	142.1E	012-0216	004-0402	--------
201800Z	22.1N	142.0E	004-0228	002-0498	--------
210000Z	22.5N	142.1E	056-0246	081-0186	--------
210600Z	22.8N	142.5E	041-0102	010-0342	358-0474
211200Z	23.1N	143.1E	043-0258	008-0354	--------
211800Z	23.7N	143.1E	104-0024	358-0246	009-0732
220000Z	24.3N	143.3E	158-0030	049-0390	--------
220600Z	24.8N	143.5E	165-0048	041-0258	024-0438
221200Z	25.4N	143.6E	104-0090	046-0474	--------
221800Z	26.3N	143.7E	073-0078	086-0150	024-0294
230000Z	27.3N	143.8E	134-0072	081-0186	--------
230600Z	28.4N	144.0E	086-0144	113-0162	054-0354
231200Z	29.9N	144.3E	101-0114	118-0204	--------
231800Z	31.6N	144.6E	128-0144	107-0216	097-0276
240000Z	33.4N	145.5E	154-0096	142-0246	--------
240600Z	35.5N	147.1E	210-0168	108-0282	146-0276
241200Z	38.0N	149.8E	201-0234	150-0276	--------

AVERAGE 24 HOUR ERROR - 0144 MI.
AVERAGE 48 HOUR ERROR - 0290 MI.
AVERAGE 72 HOUR ERROR - 0406 MI.


TYPHOON WANDA
CYCLONE 31
18–24 SEPTEMBER 1967
24 HR FORECAST POSITS
LEGEND
0----24 HR FORECAST POSITS
6 HR BEST TRACK POSITS
24/12Z
24/00Z
23/00Z
22/00Z
19/00Z
18/06Z
VLADIVOSTOK
TSINGTAO
SHANGHAI
TOKYO
OKINAWA
CHICHI JIMA
IWO JIMA
SAIPAN
GUAM
MANILA
YAP
ULITHI
TRUK
PONAPE
ENIWETOK ATOL
RONGERIK ATOL
KWAJALEIN
MAJURO
WAKE I